

T&E COMMITTEE #4
June 30, 2005

MEMORANDUM

June 28, 2005

TO: Transportation and Environment Committee
FROM: ^{Go} Glenn Orlin, Deputy Council Staff Director
SUBJECT: Facility planning review – Chapman Avenue Extended

The Council appropriated funds under the Facility Planning—Transportation project for the Department of Public Works and Transportation (DPWT) to evaluate means for constructing a new segment of Chapman Avenue from the Windsor Villa Apartments (north of Old Georgetown Road) to north of the Forum Condominiums, and reconstructing Maple Avenue from north of the Forum Condominiums to Randolph Road in the White Flint area of North Bethesda. DPWT has nearly completed Phase I of facility planning for this project: the feasibility study stage.

This worksession is the opportunity for Committee members and other interested Councilmembers to provide informal feedback to DPWT as to whether to proceed to Phase II of facility planning—the detailed planning stage that will produce the precise project scope and develop reliable estimates of cost and community and environmental impact—and if so, what should be studied. DPWT will be ready to proceed to Phase II soon after this review. According to its funding schedule in the Facility Planning-Transportation project, Chapman Avenue Extended could be proposed as an amendment to the FY07-12 CIP in late 2006 or early 2007.

DPWT has produced a project planning prospectus that describes the purpose and need of the project, the alternatives evaluated, the traffic and community and environmental impacts of the alternatives, and a recommended alternative to be carried forward for detailed planning in Phase II. The cover and the Executive Summary of the prospectus is on ©1-3. (Council staff has a copy of the prospectus if any Councilmember wishes to review it.)

Four options were examined, all of which have a common cross-section (see ©11): a 40'-wide roadway consisting of two 12'-wide travel lanes and two 8'-wide parking lanes, plus 5'-wide sidewalks separated from the roadway by a landscape panel 3'-to-8'-wide. This is consistent with the current business district street design standard for a 70'-wide right-of-way.

DPWT recommends alignment Concept B, which skirts the Forum Condominiums property and has the least impact on commercial and industrial properties among the options studied. Concept B has two 70-80-degree turns; this is not standard for a through street, but not inconsistent with a local street with a relatively low speed and a moderate projected traffic volume.

Even with an alignment designed to mitigate right-of-way impacts, Concept B still will have significant takings for a project this size. Depending upon the final design there would be four-to-five businesses taken as well as an estimated 37 private parking spaces. (The on-street parking in the proposed cross-section of Chapman Avenue would include 30-35 new spaces, although these would be public spaces and most likely have parking meters.) The estimated cost of this project is in the \$6.6-7.0 million range, of which \$3.3-3.7 million—about half the cost—would be for right-of-way acquisition alone. Concept B has no significant environmental impacts; the prospectus cites only that there is a potential effect on 0.01 acre of wetland.

The Planning Board reviewed this study at its June 23 worksession, and it unanimously concurred (4-0, Commissioner Wellington not present) with DPWT and its own staff's recommendation to carry forward Concept B to Phase II of facility planning. The Planning staff's memo is on ©4-12. The Planning Board's comments are on ©13.

Aruna Miller, DPWT's study manager, will brief the Committee on this project and DPWT's recommendations. David Paine from the Planning staff will comment on the Planning Board's discussion and recommendations.

Alignment. The purpose of Chapman Avenue Extended is described in North Bethesda/Garrett Park Master Plan, adopted in 1992:

The purpose of Chapman Avenue Extended is to provide a framework for local circulation vehicle trips, including shuttles, and not to compete with Nebel Street for north-south internal trips. The intersection configurations would allow for but not emphasize through movement, the alignment would allow some curvature, and the streetscaping would emphasize the more local nature of the street. The location of the exact alignment should be flexible, as it will be dependent upon future development plans for the large parcels served by this proposed street. (North Bethesda/Garrett Park Master Plan, p. 178)

Therefore, in the hierarchy of north-south streets in this area, it is clear that Rockville Pike is to carry primarily through traffic, Nebel Street (with its extension north behind the Montrose Crossing center to Bou Avenue) is mainly to carry local trips between White Flint and Twinbrook, and Chapman Avenue (which includes Huff Court, Citadel Avenue, Maple Avenue, and the main street through Montrose Crossing), while also continuous, is mainly to serve even shorter north-south trips. Even this planned local-trip-serving function has been diminished by two subsequent actions by the Planning Board:

- the approval of the Montrose Crossing development, which approved Chapman Avenue as a private street with a design that is circuitous and has a speed low enough to render it an unlikely option for through traffic, even between Randolph Road and Bou Avenue; and

- the approval of the grid system of streets of North Bethesda Town Center (LCOR) development, which has the result of severing the direct connection between Citadel Avenue south of Marinelli Road and Chapman Avenue north of Old Georgetown Road.

So, when it is all completed, while one could drive between White Flint and Twinbrook via Chapman Avenue, it will be very unlikely because the road's jogs and other design elements will effectively enforce a low speed. Therefore, Concept B, with its acute-angled turns, fits into this evolved general concept for all of Chapman Avenue.

One element of Concept B deserves more investigation: the proposed intersection of Chapman Avenue with new access points to/from two parking lots northwest of the Forum Condominiums property (highlighted on ©10). As designed, these new access points would require further stops on Chapman Avenue, and making these connections would encourage cut-through trips through these lots. This location should be redesigned to eliminate potential stops on Chapman Avenue. For example, access from Chapman Avenue to the lots might be allowed, but not vice versa.

Cross-section. As noted earlier, the proposed 40'-wide roadway shown on ©11 is standard for a business district street. However, given the cost and impact of right-of-way, the need for this much pavement should be scrutinized closely. First of all, considering its low speed and moderate volume, 11'-wide lanes would suffice, even in the Maple Avenue segment, which is zoned I-4 and serves industrial uses. More importantly, there is little evidence that on-street parking is necessary north of the Windsor Villa Apartments. There is no on-street parking on Maple Avenue, there is no access from the Forum Condominiums, and the other adjacent shopping centers (also zoned I-4) have plentiful off-street parking. The section of Chapman Avenue through Montrose Crossing—just north Randolph Road—also has no on-street parking.

Constructing Chapman Avenue Extended with 11'-wide travel lanes and without on-street parking would reduce the roadway width from 40' down to 22'. Reducing the pavement width by 18' and exercising flexibility with the width of the landscape panel would allow DPWT both to reduce the construction cost and right-of-way impacts, as well as to virtually eliminate the increase in impervious surface. Furthermore, a 40'-wide street will produce higher travel speeds (especially when there would be few if any parkers—most of the time) than would a 22'-wide street.

Council staff recommendation: Recommend proceeding to Phase II of facility planning with Concept B, with the following revisions:

- Set the roadway cross-section at 22': two 11' travel lanes and no on-street parking.
- Redesign Chapman Avenue northwest of the Forum Condominium property so as to eliminate any potential stop condition on Chapman Avenue at that location.

Division of Capital Development

Chapman Avenue Extended (CIP 509337)

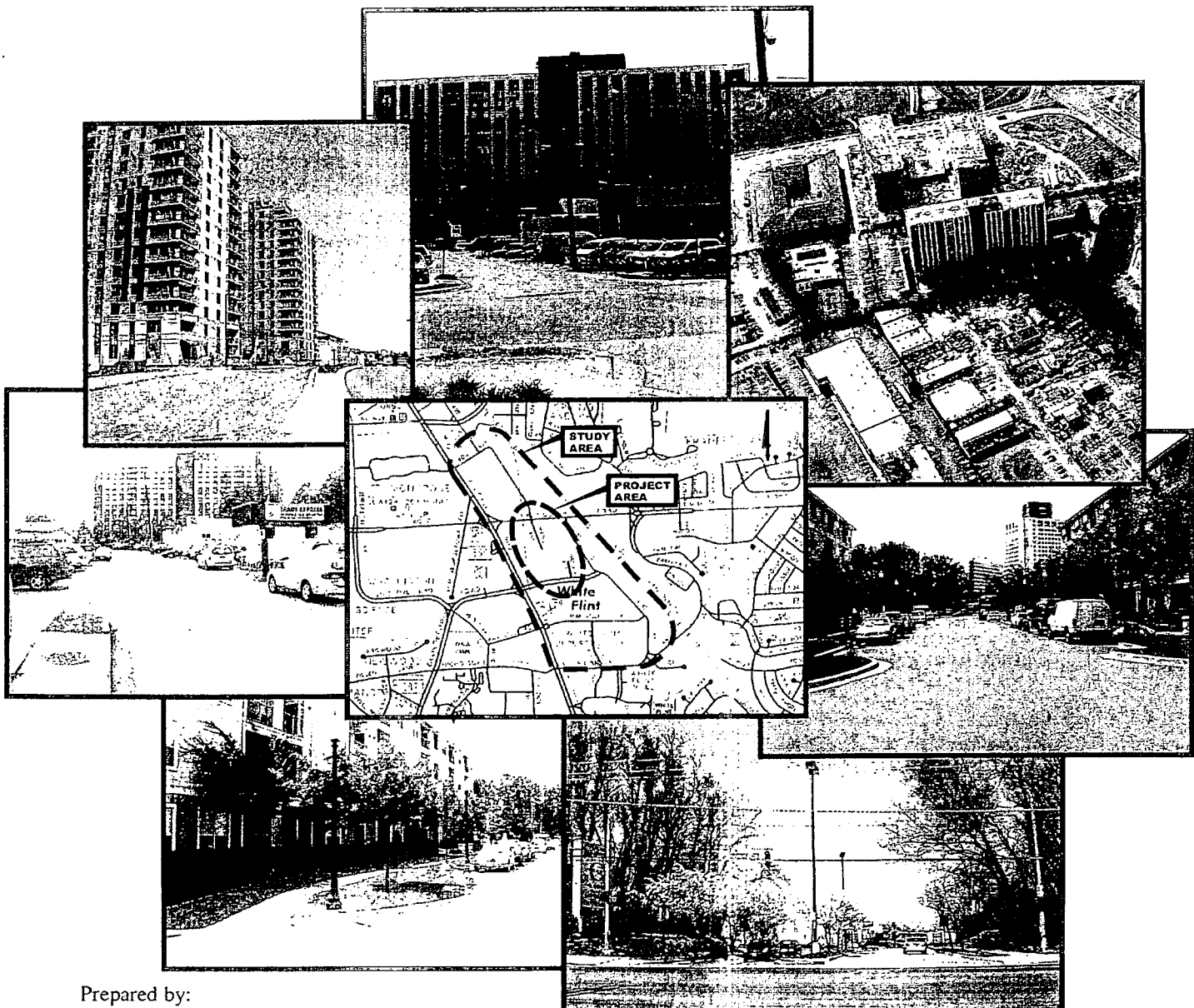
Facility Planning - Phase I

Project Prospectus



June, 2005

Montgomery County
Department of Public Works and Transportation



Prepared by:

The Wilson T. Ballard Company
Consulting Engineers



EXECUTIVE SUMMARY

Introduction

Chapman Avenue is located in North Bethesda, Maryland (See Figure I-1). The 1992 North Bethesda-Garrett Park Master Plan recommends Chapman Avenue be extended from Bou Avenue to Nicholson Lane. The Montgomery County Department of Public Works and Transportation, Division of Capital Development, has completed a Phase I Facility Planning Study to address the extension of Chapman Avenue from Randolph Road at its intersection with Maple Avenue to Old Georgetown Road, just south of the Forum Condominiums, a distance of approximately 1,650 feet.

The purpose of the Phase I Study was to evaluate public infrastructure improvements that will:

- Facilitate local circulation to adjacent land uses.
- Provide a framework for shorter, local circulation vehicle trips.
- Provide roadway continuity, connectivity, and access.
- Facilitate pedestrian movements by linking major retail centers and major planned employment and residential centers.

This Prospectus concludes the Phase I Study, and will be used by the Director of the Montgomery County Department of Public Works and Transportation to determine whether the project should proceed to Phase II.

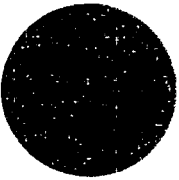
Concepts and Recommended Alternative

The Chapman Avenue Study Team used the Master Plan as a guide and considered current conditions, preliminary engineering, traffic analyses and public input to arrive at five alternatives to analyze (See Section II.E, Alternatives Analysis, for detailed descriptions). Concepts A, B, C and D were developed using a 60-70' right-of-way width as recommended by the sector plan and consisted of a 40-foot-pavement section with two 12-foot travel lanes, two 8-foot parking lanes and a 5-foot wide sidewalk on both sides the roadway.

1. No-Build Alternative: Considered as a base-line condition for comparison. The No-Build would provide routine maintenance and minor construction projects only and the improvements would not be expected to measurably affect roadway capacity or safety.
2. Concept A (See Figure II-7): Concept A consisted of a curvilinear roadway configuration; however, this Concept was removed from further consideration due to significant displacements and right-of-way impacts to adjacent properties and concerns raised by local residents that the alignment would encourage excessive speeds.
3. Concept C (See Figure II-8): Concept C included T-intersect type roadway configuration with roundabouts at two locations. This Concept was removed from further consideration due to significant property impacts.
4. Concept D (See Figure II-9): Concept D provided for curvilinear roadway configuration. However it differed from Concept A in that the alignment was moved northward to avoid impact to the Forum Condominium property. Concept was removed from further consideration because of excessive overall property impacts, including potential displacements and structural impacts to the adjacent properties.
5. Concept B/ The Recommended Alternative (See Figure II-10): Concept B/ The Recommended Alternative consists of three roadway segments, totaling approximately 1375', with a T-intersect

style design configuration and was selected by the Study Team to advance to Facility Planning, Phase II because it:

- Is consistent with the North Bethesda-Garrett Park Master Plan, addresses the network road disconnects, and is economically and environmentally justifiable;
- Meets the project's Purpose and Need;
- Completes an efficient multi-modal transportation network that provides accessibility to, from, and between the study limits;
- Addresses the potential social, economic, and environmental impacts and benefits;
- Provides transportation facilities that comply with nationally recognized transportation standards;
- Provides for future transportation facilities that effectively balance costs and benefits, while minimizing need for future reconstruction;
- Supports planned land uses;
- Integrates with locally approved development plans; and
- Addresses comments and concerns conveyed by the adjacent property owners.



MCPB
Item No. 6
06/23/05

June 17, 2005

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Richard C. Hawthorne, Chief
Transportation Planning
County-wide Planning Division

RGH

John Carter, Team Leader
Bethesda/Chevy Chase Team
Community-Based Planning Division

JC

Daniel K. Hardy, Supervisor
Transportation Planning
County-wide Planning Division

DKH

FROM: David Paine, Senior Planner (301) 495-2191
Transportation Planning
County-wide Planning Division

DP

SUBJECT: Chapman Avenue Extended Phase I Facility Planning Study
Project Prospectus Recommendations

RECOMMENDATION: Transmit the following comments to the Montgomery County Department of Public Works and Transportation (DPWT):

④

1. The Chapman Avenue Facility Planning Study should proceed to Phase II of the Facility Planning process as recommended in the April 2005 Draft Project Prospectus to develop a detailed design for the recommended alternative, known as Concept B, of the master planned road.
2. At the beginning of the Phase II Facility Planning Study, DPWT should obtain staff's approval for a natural resource inventory and forest stand delineation (NRI/FSD) and a Forest Conservation Plan (FCP). It is expected that both will show no impacts that need to be mitigated.

PURPOSE OF THIS BRIEFING

The purpose of this briefing is to apprise the Montgomery County Planning Board on the Phase I Facility Planning study completed by the DPWT for the Chapman Avenue Extended project, located in North Bethesda near the intersection of Rockville Pike (MD 355) and Randolph Road.

This study, commenced in late 2004, is expected to produce a final Prospectus in the summer of 2005 based on public meetings and agency discussions.

SUMMARY OF THE PROJECT

The project limits under consideration are between Randolph Road with its intersection of Maple Avenue to just north of Old Georgetown Road, illustrated in Figure 1. The Recommended Alternative, also described as Concept B, consists of the construction of three linear roadway segments totaling 1,375 feet, with T-style intersections, and is shown in Figure 2. This is the final link in the Chapman Avenue/Citadel Avenue roadway system linking the White Flint Policy Area and the Twinbrook Policy area.

The Recommended Alternative for infrastructure and roadway improvement was developed based on Sector Plan vision and objectives, public comment, and study team review. It takes into consideration recent and planned development, as well as current public transportation projects in close proximity.

MASTER PLAN CONSISTENCY

The 1992 North Bethesda/Garrett Park Master Plan recommends Chapman Avenue to be extended from Bou Avenue to Nicholson Lane. The roadway is classified as a Business Street with a 60-foot to 70-foot right-of-way, two travel lanes and parking on each side. The proposed typical section is shown in Figure 3.

Chapman Avenue is intended to provide a route for shorter distance, local access trips needed in addition to Nebel Street. The intersection configurations should allow for, but not emphasize through movement.

Staff finds that the Recommended Alternative for the Chapman Avenue is consistent with the intent of the Master Plan.

PUBLIC OUTREACH

SUMMARY OF PROJECT PROSPECTUS STUDY FINDINGS

Benefits

Chapman Avenue will provide local circulation to adjacent land uses; access to those parcels for pedestrians, cars, bikes, and shuttles; and serve as an alternate to Rockville Pike (MD 355) for shorter, local trips. The extension will provide roadway continuity, connectivity, and access; and will facilitate pedestrian movements by linking major retail centers, major planned employment centers, and residential centers with heavy transit such as White Flint Metro, as well as each other.

Of the alternatives considered, Concept B was chosen because it:

- Completes an efficient multi-modal transportation network that provides accessibility to local land uses.
- Provides for future transportation facilities that effectively balance costs and benefits, while minimizing the need for future reconstruction.
- Responds to planned land uses, retaining the most buildable land, and impacts the fewest businesses of the alternatives considered.

Three other build alternatives were considered in the study. Concepts A and D incorporated alternative curvilinear alignments that would best facilitate vehicular traffic movement between Randolph Road and Chapman Avenue. These concepts, however, required more right-of-way and had greater property impacts than Concept B. Concept C reflected the general alignment of Concept B, but incorporated roundabouts at the right-angle turns in the alignment. Concept C was dropped because the additional traffic control value of the roundabouts did not justify the additional right-of-way and property impacts.

Design Elements

The Phase II Facility Planning study for Chapman Avenue should incorporate the following design details to be consistent with the vision for the White Flint Sector Plan streetscaping, including ten-foot wide sidewalk panels, five-foot wide tree pits and Washington Globe streetlights.

Impacts

Socioeconomic impacts projected to occur as a result of the Recommended Alternative would include impacts to three buildings and right-of-way or easement impacts for 16 total properties. Businesses to be affected include eight auto oriented retail and service businesses, three retail properties, and three unknown or vacant parcels. A construction easement impact is also expected on the Forum condominium property. A more thorough evaluation will be conducted during Phase II.

The Recommended Alternative may impact a 0.01-acre potential wetland. Aside from this potential wetland, there are no other environmental encumbrances, such as stream valley buffers, steep slopes, high priority forests, erodible soils, or rare, threatened or endangered species located within the study area. DPWT will still need to document this finding through submission of a NRI/FSD and a FCP during Phase II activities.

Pedestrian and Bicycle Accommodations

Implementation of Chapman Avenue will provide a direct pedestrian link between considerable residential development, the North Bethesda Town Center, and commercial area to the north. It breaks up the large suburban block providing shorter pedestrian and bicycle routes, which encourages those modes. The study team initially considered a shared-use path along Chapman Avenue to address the 1992 Master Plan recommendation for a bike path along the Washington Metropolitan Area Transit Authority (WMATA) tunnel between White Flint and Twinbrook. The 2005 Countywide Functional Master Plan of Bikeways confirmed that the function of bike path recommended along the WMATA tunnel would be appropriately served along Rockville Pike as part of shared-use path SP-41.

RELATED PUBLIC AND PRIVATE PROJECTS

The Chapman Avenue study is designed to complete the master planned roadway that will facilitate access to several ongoing private and public investments in the White Flint and Twinbrook areas of North Bethesda as noted on Figure 4. Prior Planning Board actions include the following:

Land Use Projects

- LCOR/North Bethesda Town Center: 32.42 acres; 1,350 multi-family residential units including 169 MPDUs, 1,148,000 square feet of commercial office & 202,037 square feet of general retail and an 80,000 square foot theater. Zoning Map Amendment No. G-801; Preliminary Plan Review No. 1-04049, Approved Sept 30, 2004; Zoning Map Amendment No. G-801, Approved November 7, 2002.
- White Flint Place, 235 multi-family residential units including 30 MPDUs, & 15,000 square feet of retail. Preliminary Plan Review No. 1-01039A & Site Plan Review No. 8-01017B, Approved May 27, 2004. Site Plan Review No. 8-01017A, February 27, 2003. Preliminary Plan Review No. 1-01039 for 259,430 square feet office/retail and 480 multi-family dwelling units.
- Rockville Target, 147,990 square feet of commercial retail. Project Plan Amendment – No. 9-01003A & Site Plan Amendment – No. 8-01002A, Jan 16, 2003.
- Montrose Crossing Phase III, 150 multi-family residential units, Site Plan Review No. 8-95036B, April 24, 2003.

Transportation Projects

- Citadel Avenue, Mandatory Referral No. 03805-DPWT-1, Huff Court/ Nicholson Lane. April 24, 2003.
- Nebel Street Extended, Phase I Recommendations, November 8, 2001.
- MD 355/Montrose Road/Randolph Road – Intersection Improvement Study, Selected Alternate Recommendations, February 28, 2002.
- Montrose Parkway East Facility Planning, Phase I Recommendations, June 17, 2004.
- White Flint WMATA Parking Structure; 6-level garage, Mandatory Referral No. 04202-WMATA-1, July 22, 2004.

DP/gw

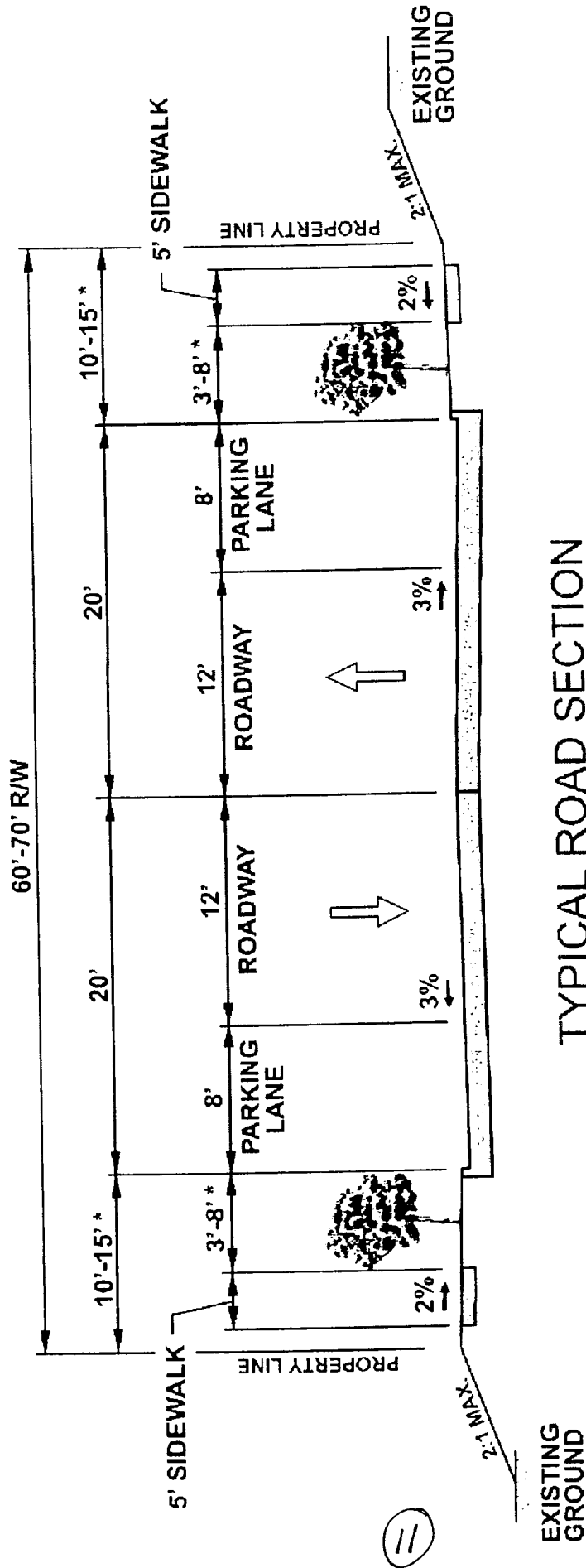
Attachments

mno to mcpb re Chapman Ave Phase I

100



Figure 2



TYPICAL ROAD SECTION

Reference: Montgomery County Department of Transportation
Commercial / Industrial Road Standard.

* Note: The width of proposed backing will be evaluated during the design phase, considering proximity of buildings, landscaping needs and planned uses for abutting properties. Consideration will also be given to paving the entire backing width as sidewalk.



CHAPMAN AVENUE EXTENDED
(CIP 509337)
FACILITY PLANNING - PHASE I

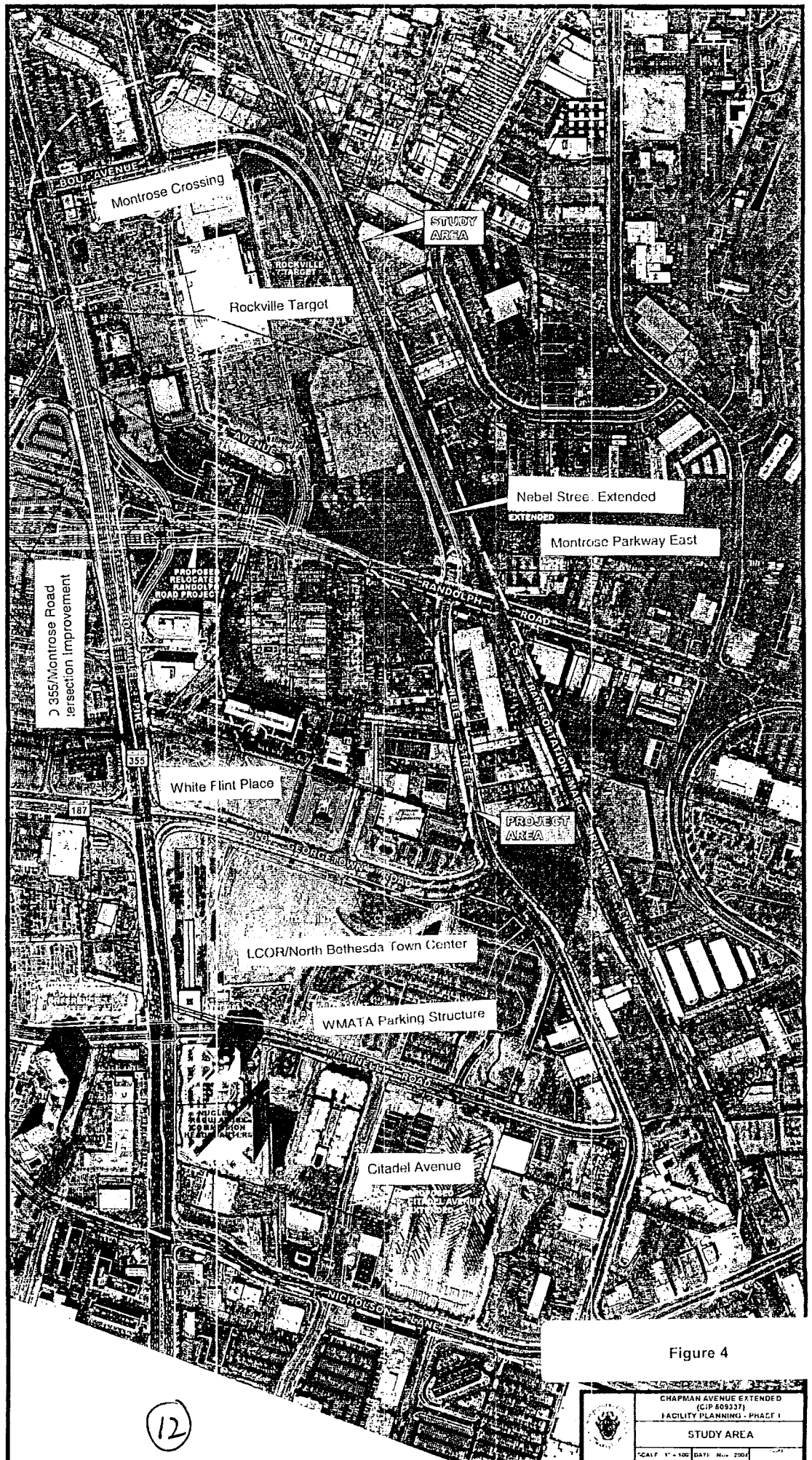
TYPICAL SECTION

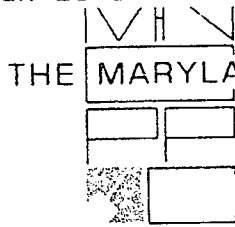
NOT TO SCALE

DATE: April, 2005

FIGURE
11-6

Figure 3





THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

(301) 495-4605

Montgomery County Planning Board
Office of the Chairman

June 24, 2005

Mr. Arthur Holmes, Jr., Director
Montgomery County Department
of Public Works and Transportation
101 Monroe Street, 10th Floor
Rockville, Maryland 20850

Dear Mr. Holmes:

The Planning Board reviewed the Phase I Chapman Avenue Extended Facility Planning study Project Prospectus at the regularly scheduled meeting of June 23, 2005. The Board endorsed the enclosed staff recommendations as described below.

1. The Chapman Avenue Facility Planning Study should proceed to Phase II of the Facility Planning process as recommended in the April 2005 Draft Project Prospectus to develop a detailed design for the recommended alternative, known as Concept B, in the study of the master planned road.
2. At the beginning of the Phase II Facility Planning Study, Department of Public Works and Transportation should obtain staff's approval for a Natural Resource Inventory and Forest Stand Delineation, and a Forest Conservation Plan. It is expected that these documents will demonstrate no impacts that need to be mitigated.

The Board thanks you, and your staff for providing us this opportunity to comment on the Phase I study. We look forward to continuing to work with you during the next study phase.

Sincerely,

Derick P. Berlage
Chairman

DPB:DP:gw
Enclosure

Ltr to Holmes re CHapman Avenue Phase I study